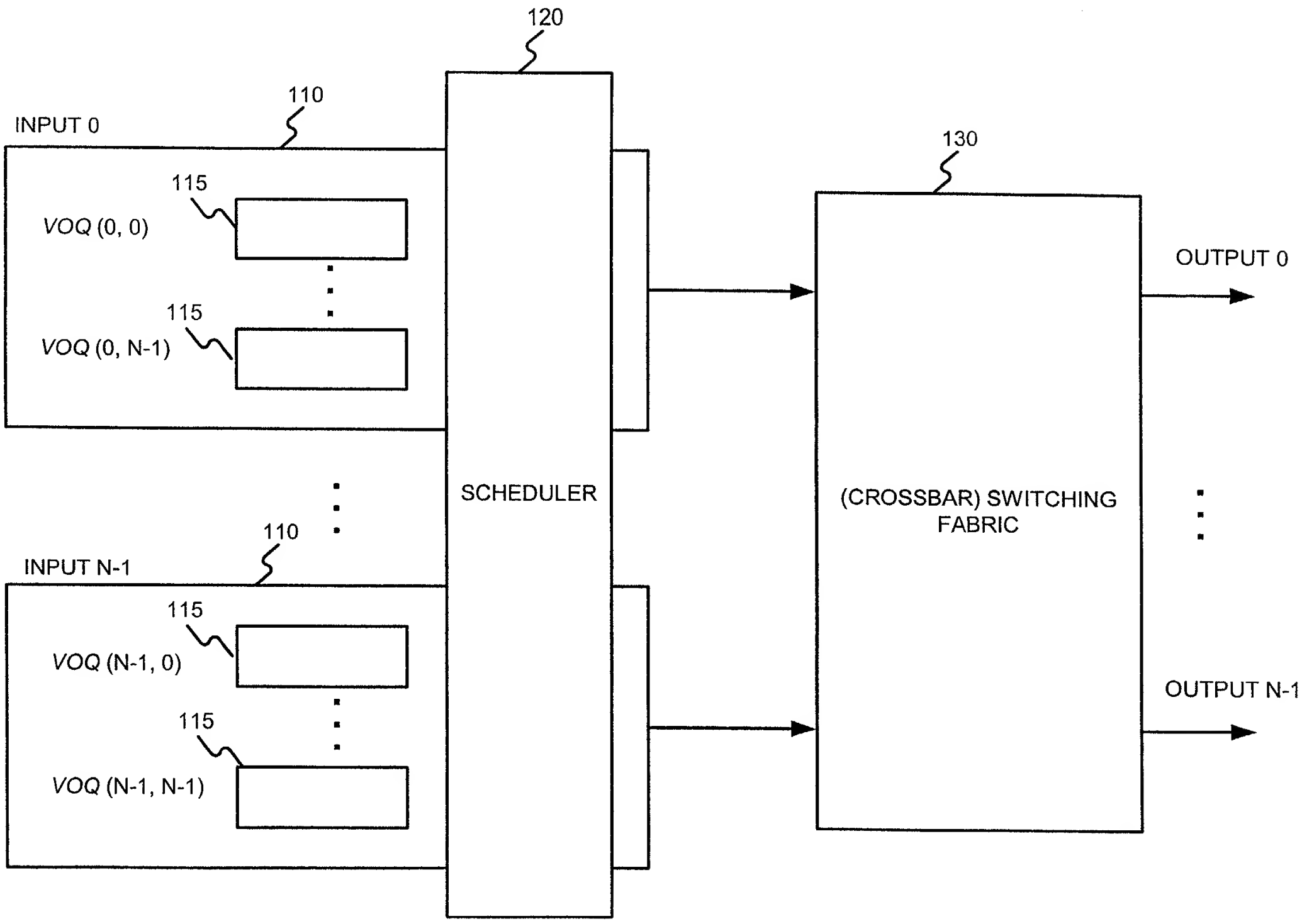
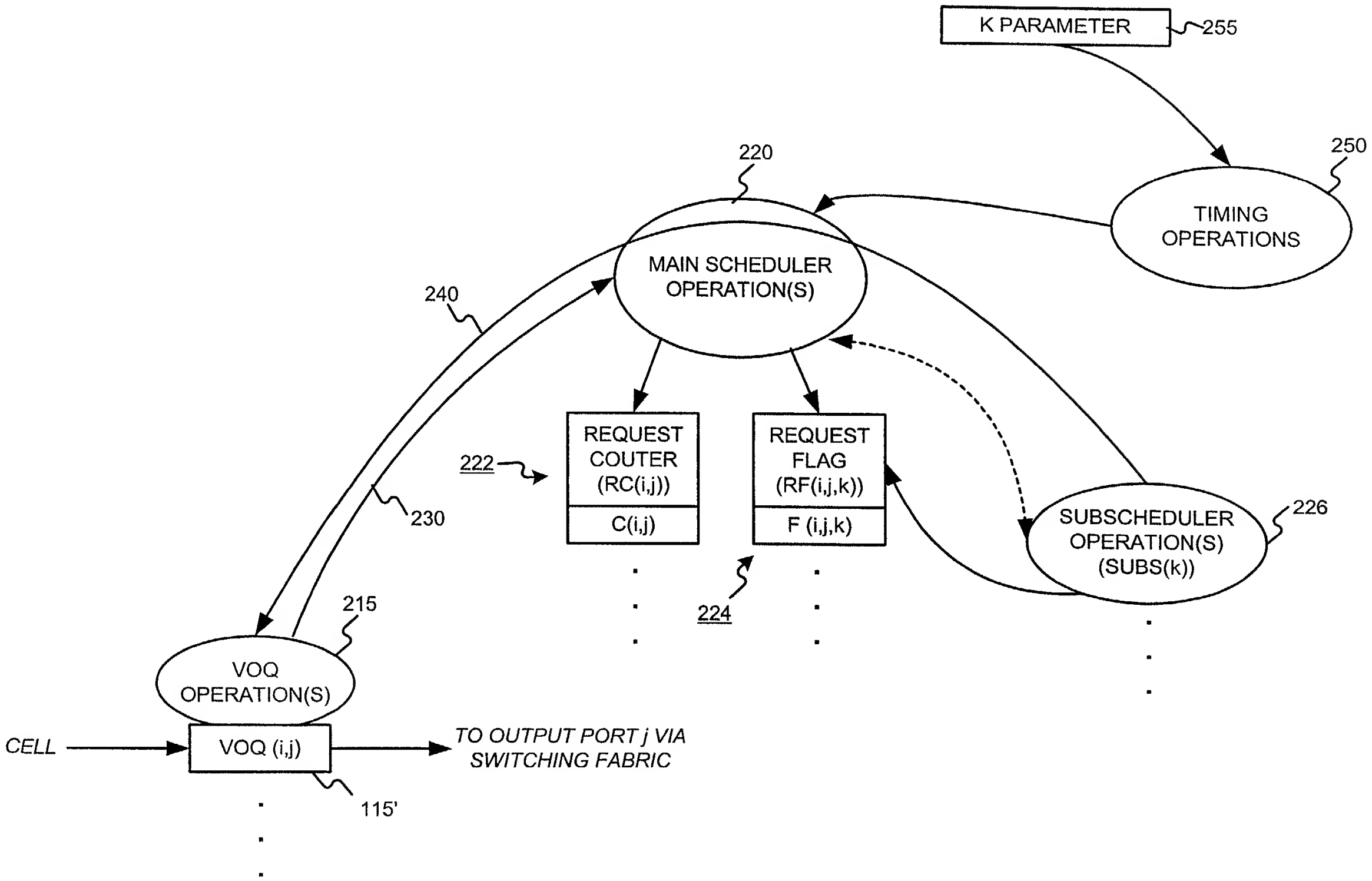
ADDED BY EFS



100

FIGURE 1


K PARAMETER
255
220
250
TIMING OPERATIONS
MAIN SCHEDULER OPERATION(S)
240
222
REQUEST COUTER (RC(i,j))
C(i,j)
REQUEST FLAG (RF(i,j,k))
F (i,j,k)
230
SUBSCHEDULER OPERATION(S) (SUBS(k))
226
215
224
VOQ OPERATION(S)
CELL
VOQ (i,j)
TO OUTPUT PORT j VIA SWITCHING FABRIC
115'

200

FIGURE 2

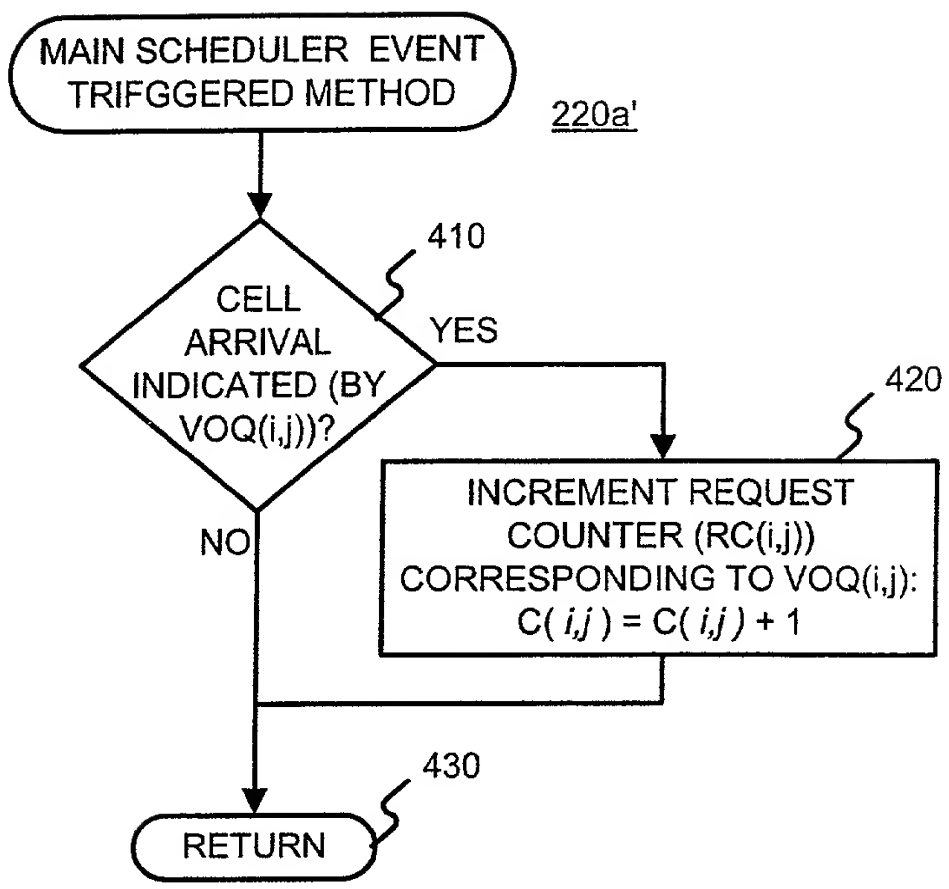

MAIN SCHEDULER EVENT TRIFGGERED METHOD
220a'
410
CELL ARRIVAL INDICATED (BY VOQ(i,j))?
YES
NO
420
INCREMENT REQUEST COUNTER (RC(i,j)) CORRESPONDING TO VOQ(i,j):
C(i,j) = C(i,j) + 1
430
RETURN

FIGURE 4A

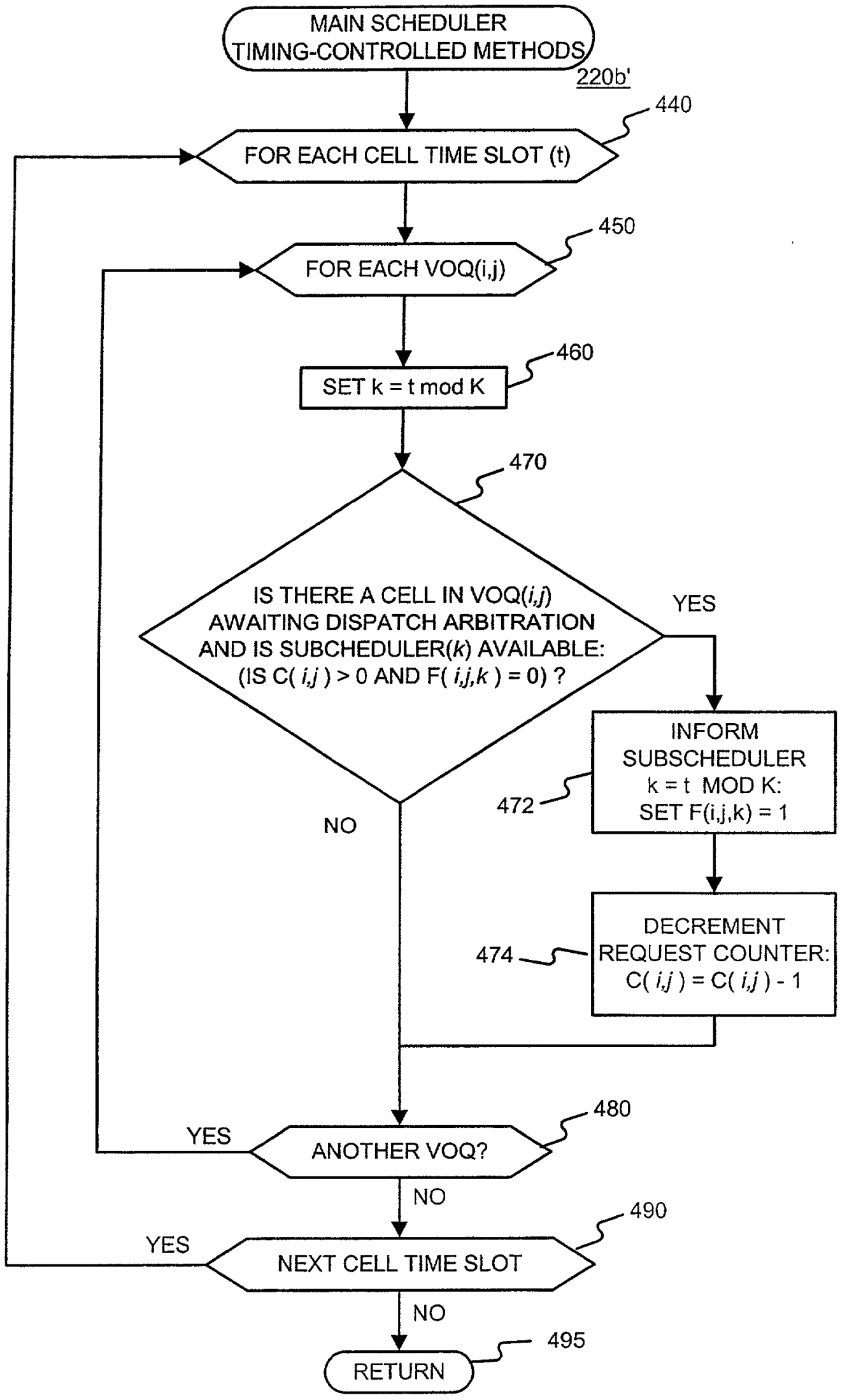
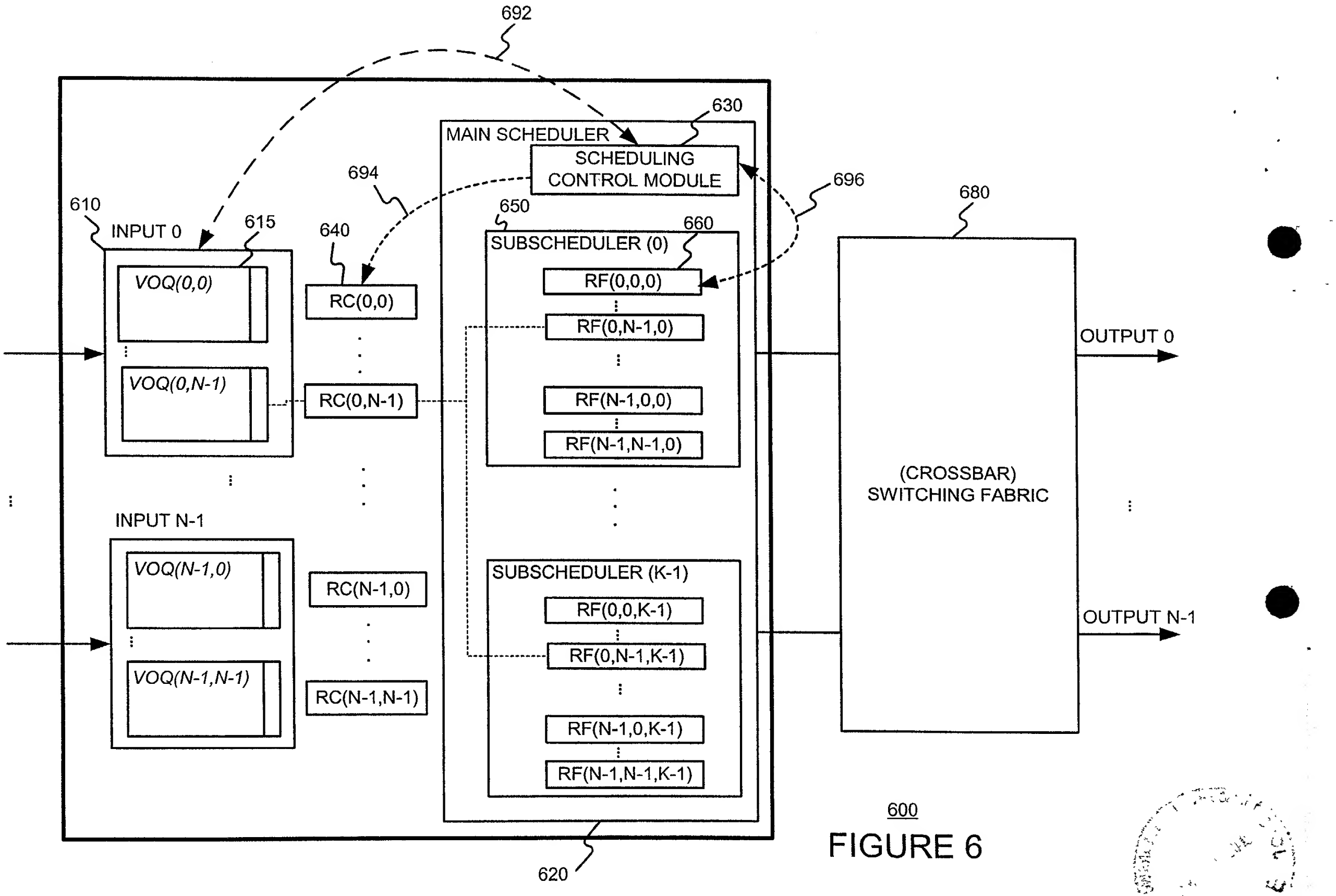

MAIN SCHEDULER
TIMING-CONTROLLED METHODS
220b'
440
FOR EACH CELL TIME SLOT (t)
450
FOR EACH VOQ(i,j)
460
SET k = t mod K
470
IS THERE A CELL IN VOQ(i,j)
AWAITING DISPATCH ARBITRATION
AND IS SUBCHEDULER(k) AVAILABLE:
(IS C(i,j) > 0 AND F(i,j,k) = 0) ?
YES
NO
INFORM
SUBSCHEDULER
k = t MOD K:
SET F(i,j,k) = 1
472
DECREMENT
REQUEST COUNTER:
C(i,j) = C(i,j) - 1
474
480
YES
ANOTHER VOQ?
NO
490
YES
NEXT CELL TIME SLOT
NO
495
RETURN

FIGURE 4B

20070 DTE260



600

FIGURE 6

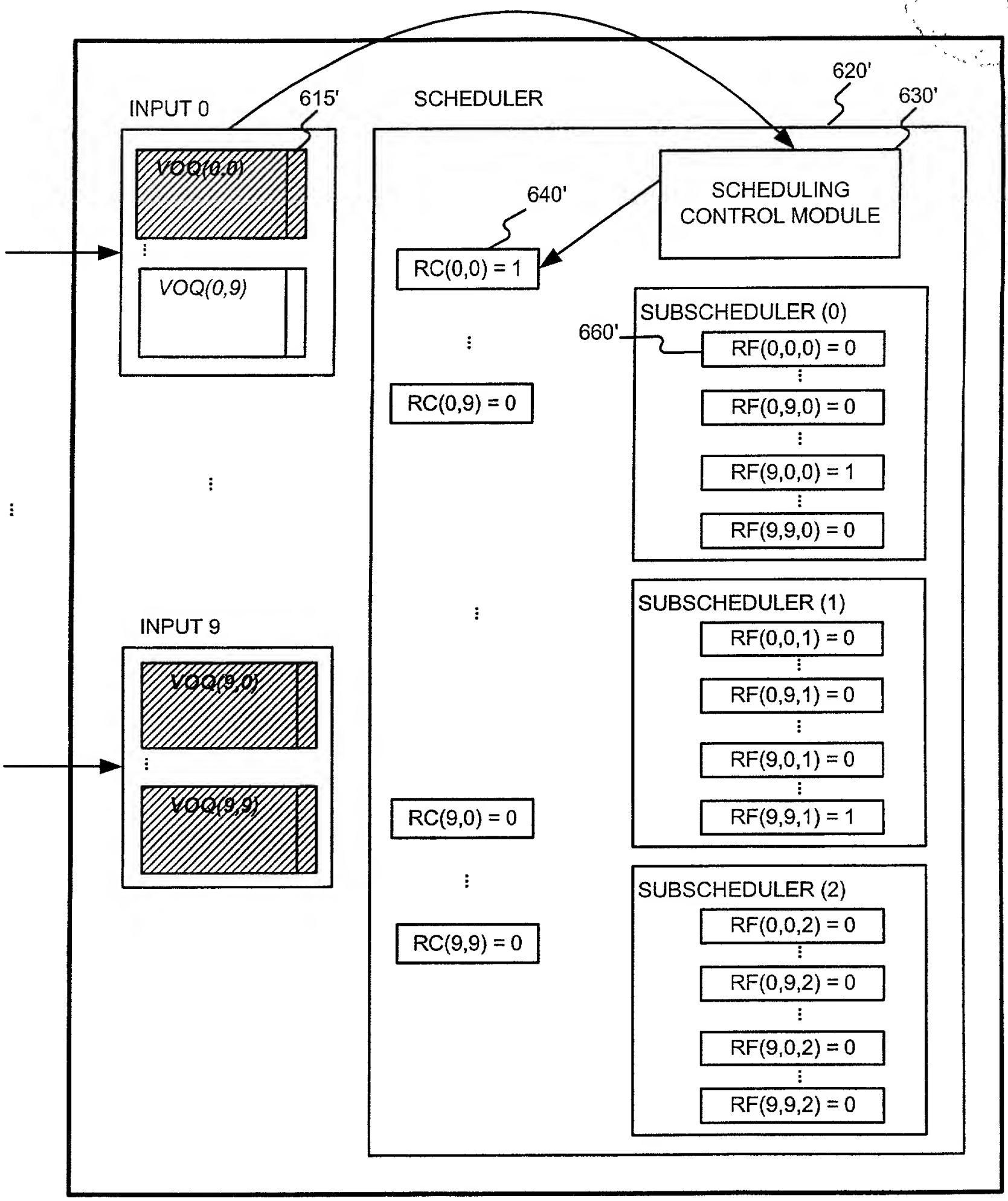

INPUT 0
615'
SCHEDULER
620'
630'
VOQ(0,0)
VOQ(0,9)
640'
SCHEDULING CONTROL MODULE
RC(0,0) = 1
RC(0,9) = 0
SUBSCHEDULER (0)
660'
RF(0,0,0) = 0
RF(0,9,0) = 0
RF(9,0,0) = 1
RF(9,9,0) = 0
SUBSCHEDULER (1)
RF(0,0,1) = 0
RF(0,9,1) = 0
RF(9,0,1) = 0
RF(9,9,1) = 1
INPUT 9
VOQ(9,0)
VOQ(9,9)
RC(9,0) = 0
RC(9,9) = 0
SUBSCHEDULER (2)
RF(0,0,2) = 0
RF(0,9,2) = 0
RF(9,0,2) = 0
RF(9,9,2) = 0

FIGURE 7a

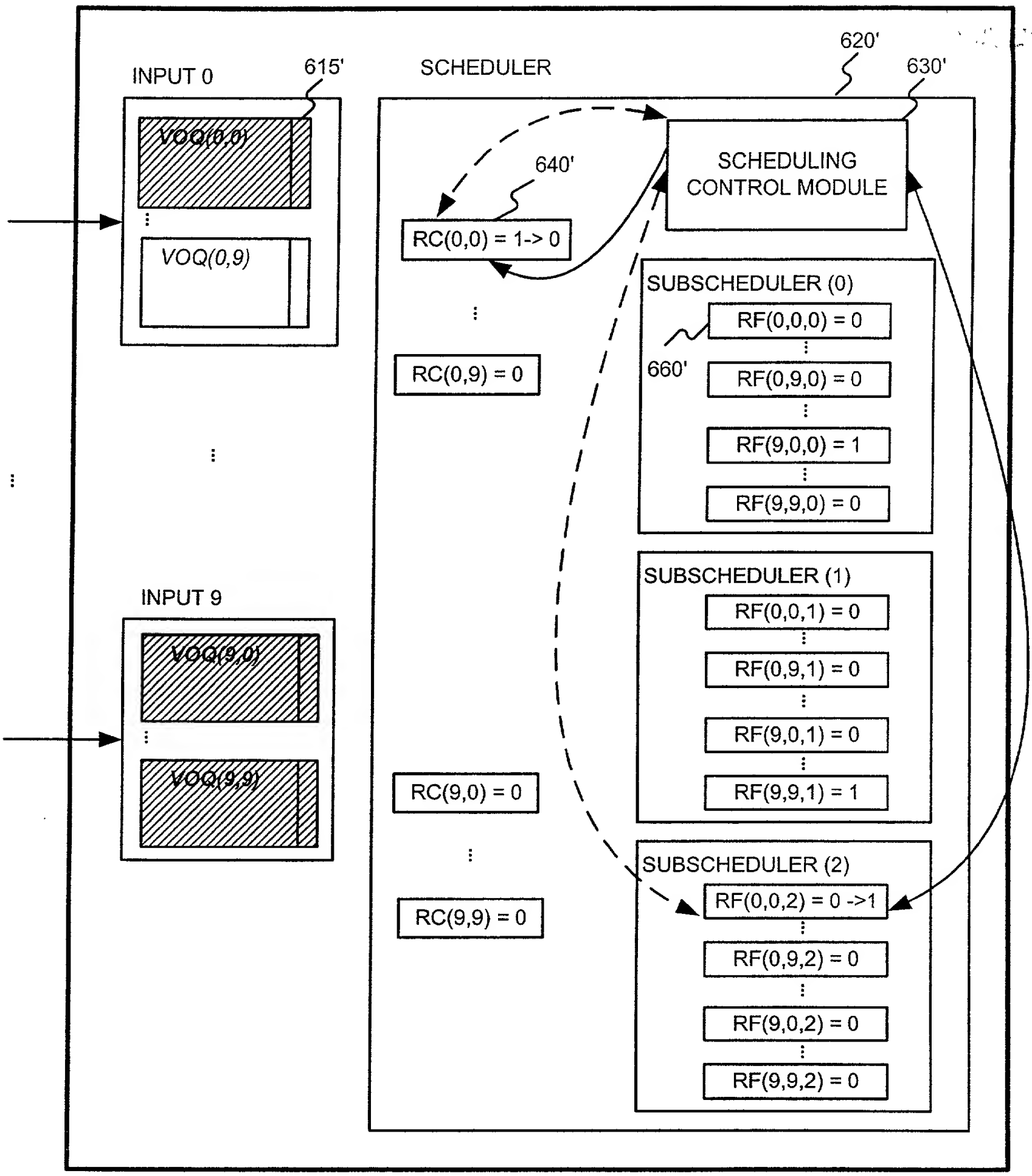

INPUT 0
615'
VOQ(0,0)
VOQ(0,9)
INPUT 9
VOQ(9,0)
VOQ(9,9)
SCHEDULER
620'
630'
SCHEDULING CONTROL MODULE
640'
RC(0,0) = 1-> 0
RC(0,9) = 0
RC(9,0) = 0
RC(9,9) = 0
SUBSCHEDULER (0)
660'
RF(0,0,0) = 0
RF(0,9,0) = 0
RF(9,0,0) = 1
RF(9,9,0) = 0
SUBSCHEDULER (1)
RF(0,0,1) = 0
RF(0,9,1) = 0
RF(9,0,1) = 0
RF(9,9,1) = 1
SUBSCHEDULER (2)
RF(0,0,2) = 0 ->1
RF(0,9,2) = 0
RF(9,0,2) = 0
RF(9,9,2) = 0

FIGURE 7b

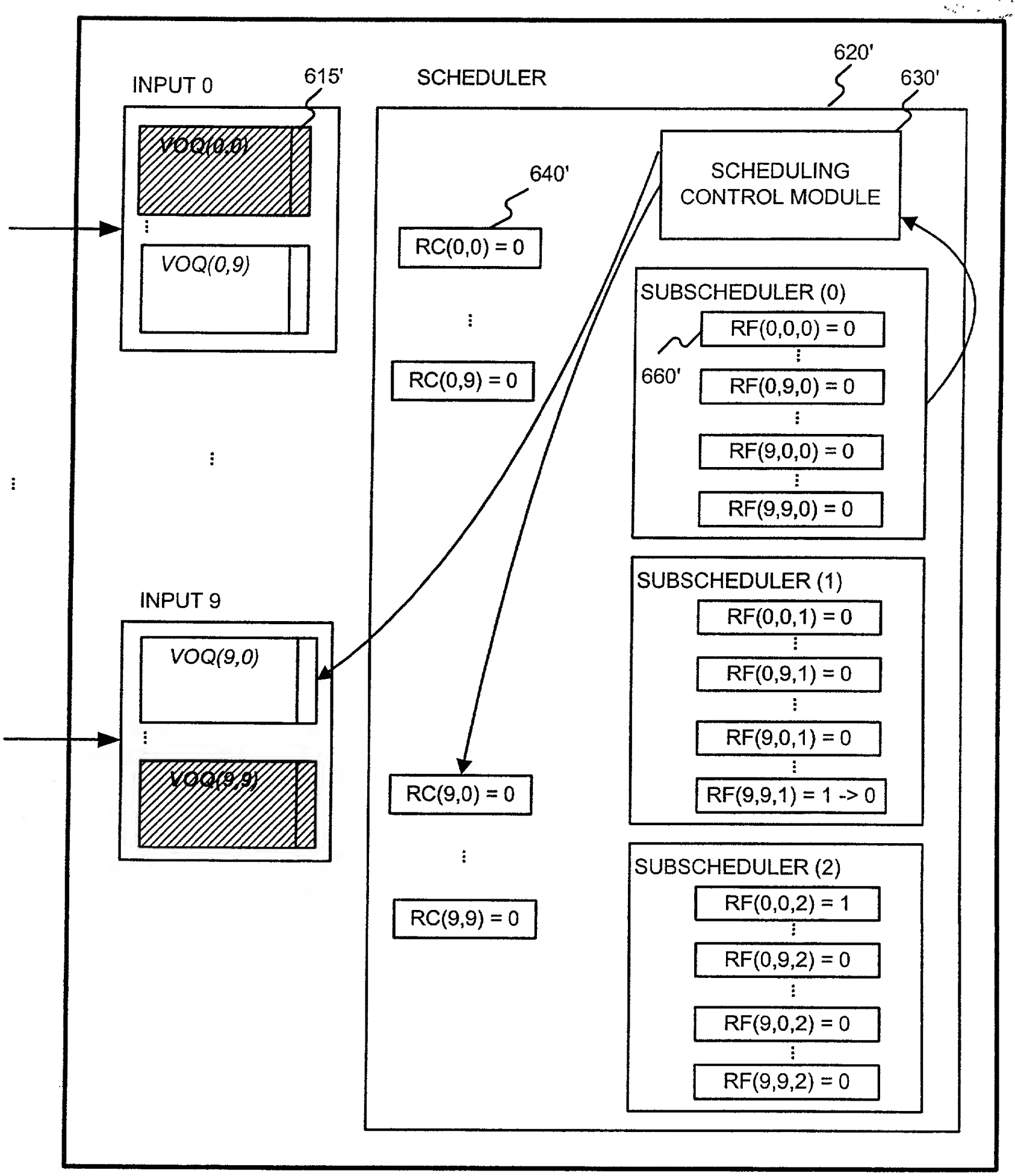

INPUT 0
615'
VOQ(0,0)
VOQ(0,9)
INPUT 9
VOQ(9,0)
VOQ(9,9)
SCHEDULER
620'
630'
640'
SCHEDULING CONTROL MODULE
RC(0,0) = 0
RC(0,9) = 0
RC(9,0) = 0
RC(9,9) = 0
SUBSCHEDULER (0)
660'
RF(0,0,0) = 0
RF(0,9,0) = 0
RF(9,0,0) = 0
RF(9,9,0) = 0
SUBSCHEDULER (1)
RF(0,0,1) = 0
RF(0,9,1) = 0
RF(9,0,1) = 0
RF(9,9,1) = 1 -> 0
SUBSCHEDULER (2)
RF(0,0,2) = 1
RF(0,9,2) = 0
RF(9,0,2) = 0
RF(9,9,2) = 0

FIGURE 7c